

Seeding and Mulching for Erosion Control

Bare slopes resulting from road construction, building pads, stream channel work, or other earth moving activities represent a source of water pollution in Madera County. Re-vegetation is the most effective means of correcting this problem. Typically, the cost of applying seed and mulch is insignificant relative to the cost of the overall earth-moving portion of a project. It not only protects the owner's initial investment but also meets some of the requirements of the Clean Water Act, in particular the National Pollution Discharge Elimination System (NPDES).

The following lists of seed mixtures are common for the Central Sierra foothills. Seed should be applied between October 12 and November 30 to take advantage of the gentler early rains. These are **annual** grasses and legumes, which means the plants produce a crop of seeds every year in the late spring. The mature stand of crop may present a potential fuel hazard and should be managed appropriately, especially in the vicinity of combustible structures. To aid in fire protection and to insure a seed crop for the following year, the plants should be cut down after seed maturity.

The recommend seed rates are given in pounds per acre (Lbs. / Acre). To estimate an acre it is 43,560 square feet or an area that is 209 feet by 209 feet (a square). The playing surface of a football field is approximately one acre (45,000 square feet of a football field versus 43,560 square feet in an acre). Broadcasting the seeds can be achieved by several means. One would be to hand broadcast. Another would be to use a common lawn fertilizer spreader with a setting that is appropriate for the size of seed used. Mulching is an important component of the stabilization of the bare exposed soils. The mulch acts as camouflage for the seeds to protect them from being eaten by birds. The mulch helps to dissipate the energy of falling raindrops and protects the seeds from washing away. The mulch also retains moisture close to the ground and thus helps facilitate seed germination. The easiest mulch material to obtain is barley or oat straw, which is readily available at a feed store and is usually sold by the bale. Approximately 60 bales are needed for each acre to be protected, but the more the better. The straw can be applied by hand or mechanically (straw blowers, look in the telephone book for an erosion control contractor). Additional holding material may need to be used over the straw on steep slopes, such as jute or plastic netting. These can usually be purchased at an irrigation supply store.

Mix Number	Seed Varieties	Lbs. / Acre
1	Blando Brome	18
2	Annual Rye Grass	25
3	Blando Brome Rose Clover	12 9
4	Blando Brome Lana Vetch	12 15
5	Zorro Annual Fescue	12